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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,982	08/22/2003	Deborah A. Langer	3248	3038

7590 05/25/2006

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,982

Applicant(s)

LANGER ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-9 and 11-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 3/6/06.

The new grounds of rejection set forth below are necessitated by applicants' amendment and thus, the following action is final.

Information Disclosure Statement

2. It is noted that the reference "Les Lubrifiants Synthetiques: Evolution de la Lubrification" which had been stricken from the IDS filed 3/31/05 given that there was no concise explanation of its relevance has now been considered in light of the explanation found on page 10 of the amendment filed 3/6/06. Thus, the reference has been cited on the PTO-892 included with this office action.

Claim Objections

3. Claims 9, 12, and 16 are objected to because of the following informalities:

(a) A symbol appears to be missing in line 5 after "<0.05". It is suggested that "%" is inserted after "<0.05".

In response to the above objection which was previously set forth in the office action mailed 12/8/05, applicants state on page 11 of the amendment filed 3/6/06 that in view of the amendment to claim 16, the above objection is overcome. However, it is noted that claim 16 has not been amended.

(b) In light of the amendment to claim 9, it is noted that line 4 of the claim now recites “lignin” twice. It is suggested that one occurrence of “lignin” is deleted from the claim.

(c) In light of the amendment to claim 12, it is suggested that in line 22 after “hydrocinnamie, a comma is inserted.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-9, 11-17, 19, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 1 has been amended to recite “amine including alkanol amine, hydroxy amine”. The scope of the claim is confusing because it is not clear what the amine encompasses. Does the amine include alkanol amine and hydroxy amine or does the amine include alkanol amine or hydroxy amine. Clarification is requested.

Similar questions arise in each of claims 15 and 19 that each recite similar claim language.

(b) Claim 20 recites that “the lubricant additives add little to no ash forming metal or phosphorous compounds to the engine oil”. The scope of the claim is confusing because it is not clear what is meant by “little”. What amounts of ash would this encompass?

It is noted that the above rejection was previously set forth in paragraph 4(h) of the office action mailed 12/8/05 but does not appear to have been addressed by applicants.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-7, 9, 11, 13-15, and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Duncan et al. (U.S. 6,748,905).

The rejection is adequately set forth in paragraph 6 of the office action mailed 12/8/05 and is incorporated here by reference.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al. (U.S. 6,748,905) in view of Marelli (U.S. 6,211,253).

The rejection is adequately set forth in paragraph 11 of the office action mailed 12/8/05 and is incorporated here by reference.

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10. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al. (U.S. 6,748,905) in view of Carrick et al. (U.S. 6,583,092).

The rejection is adequately set forth in paragraph 12 of the office action mailed 12/8/05 and is incorporated here by reference.

11. Claims 1-7, 9, and 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/97952 in view of either WO 02/24842 or Carrick et al. (U.S. 6,583,092).

The rejection is adequately set forth in paragraph 14 of the office action mailed 12/8/05 and is incorporated here by reference.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/97952 in view of either WO 02/24842 or Carrick et al. as applied to claims 1-7, 9, and 11-21 above, and further in view of Marelli (U.S. 6,211,253).

The rejection is adequately set forth in paragraph 15 of the office action mailed 12/8/05 and is incorporated here by reference.

Response to Arguments

13. Applicants' arguments regarding Rizvi et al. (U.S. 4,846,985) and Harrison et al. (U.S. 6,617,396) have been fully considered but they are moot in view of the discontinuation of the use of these references against the present claims.

14. Applicants' arguments filed 3/6/06 have been fully considered but, with the exception of arguments relating to Rizvi et al. and Harrison et al., they are not persuasive.

Specifically, applicants argue that Duncan et al. is not a relevant reference against the present claims given that Duncan et al. disclose lubricant having ash content outside the scope of the present claims. As evidence to support their position, applicants note that the lubricant of Duncan et al. meets Global DHD-1 performance requirements which require that the lubricant has sulfated ash content of a maximum of 2 wt. percent and thus, the lubricant of Duncan et al. has ash content greater than 1 wt. percent which is in direct contrast to the present claims that now all require that the lubricant have ash content below 1 wt. percent.


However, while it is agreed based on the evidence submitted by applicants namely, "Global Engine Oil Service Specification DHD-1 Formulation Information and Performance Test Results", that lubricants that meet Global DHD-1 performance requirements such as that disclosed by Duncan et al. have ash content of 2 wt. percent maximum, it is the examiner's position that such ash content does meet the requirement of the present claims. That is, the performance requirements state that the lubricant has ash content of at maximum 2 wt.%, i.e. 0-2%, which clearly overlaps the presently claimed ash content of below 1 wt. percent, i.e. 0-1%. Given the overlap between the presently claimed ash content and that disclosed by Duncan et al., it is the examiner's position that Duncan et al. remains a relevant reference against the present claims.

Applicants argue that WO 01/97952 is not a relevant reference against the present claims given that WO 01/97952 does not disclose lubricant with ash content as presently claimed.

It is agreed that there is no disclosure in WO 01/97952 of lubricant as presently claimed which is why WO 01/97952 is used in combination with WO 02/24842 or Carrick et al. which each disclose lubricant comprising base oil, ashless dispersant, and antioxidant.

Applicants argue that neither WO 02/24842 nor Carrick et al. are relevant references against the present claims given that there is no disclosure in either reference of emulsified fuel as presently claimed.

While there is no disclosure in WO 02/24842 or Carrick et al. of emulsified fuel, note that WO 02/24842 and Carrick et al. are each used as a teaching reference, and therefore, it is not necessary for these secondary references to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather these references teach a certain concept, namely, the use of lubricant to extend time between oil changes and reduce NO_x levels in exhaust gas (WO 02/24842) or to provide lubricant with improved high temperature deposit performance, oxidative stability, lead and copper corrosion inhibition, and improved seal compatibility (Carrick et al.) and in combination with the primary reference, disclose the presently claimed invention.

Further, it is significant to note that WO 02/24842 does disclose that the lubricant is used with fuel and is used in combustion engine while Carrick et al. also disclose using the lubricant in combination with fuel. Given that WO 01/97952 discloses the use of emulsified fuel  and given that WO 02/24842 and Carrick et al. each teach the use of lubricant in combination with fuel, it is the examiner's position one skilled in the art would have expected that the lubricant of WO 02/2482 or Carrick et al. would be suitable in WO 01/97952.

Applicants also argue that there is no disclosure in WO 02/24842 that lubricant has ash content of less than 1 wt. percent as presently claimed.

However, it is noted that page 7, lines 3-5 of WO 02/24842 discloses that the lubricating oil composition is characterized by absence of detergents or dispersants of the ash-producing type, i.e. composition comprises no ash. Thus, it is the examiner's position that WO 02/24842 does disclose lubricant that has ash content as presently claimed.

Applicants also argue that there is no motivation to combine Duncan with Carrick et al. given that there is no disclosure in Duncan of lubricant with ash content less than 1 wt. percent as presently claimed and thus, one skilled in the art would not have the expectation that lubricant with ash content less than 1 wt. percent, such as that disclosed by Carrick et al., would be suitable for lubricating the engine of Duncan. Further, applicants argue that one would not combine Duncan et al. with Carrick et al. with the expectation that it would provide improved performance for emission control.

However, as stated above, it is the examiner's position that Duncan does disclose lubricant with ash content as presently claimed. Thus, when used in combination with Duncan, Carrick et al. is used for its teaching of specific type of dispersant already broadly disclosed by Duncan. Further, it is noted that Duncan et al. already disclose using combination of emulsified fuel and lubricant to reduce generation of NO_x and particulate emission in the exhaust of an engine. Additionally, given that Duncan in combination with Carrick et al. disclose emulsified fuel and lubricant as presently claimed, it is clear that such combination would intrinsically have improved performance for emission control.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
5/19/06